

### Section 50 Prestressing Concrete

### Section 50 Prestressing Concrete

#### 4-5001 General

Section 50, “Prestressing Concrete,” of the *Standard Specifications* includes specifications for prestressing precast or cast-in-place concrete by tensioning prestressing steel. For detailed information regarding prestressed concrete, see Section 160, “Prestressed Concrete,” of the *Bridge Construction Records and Procedures Manual* and the Office of Structure Construction’s (OSC) *Prestress Manual*.

#### 4-5001 General

#### 4-5002 Before Work Begins

The contractor must submit for approval working drawings of the proposed prestressing system in accordance with Section 5-1.02, “Plans and Working Drawings,” of the *Standard Specifications*. The working drawings are submitted directly to the Office of Structure Design, documents unit, as specified in Section 50, “Prestressing Concrete,” of the *Standard Specifications*. The review of the working drawings is a coordinated effort between the Office of Structure Design and the OSC. The Office of Structure Design has the primary responsibility for approving the working drawings.

#### 4-5002 Before Work Begins

Before work begins, the resident engineer must take the following steps:

- Verify the receipt and proper distribution of Form CEM-3101, “Notice of Materials to Be Used,” which lists prestressing materials.
- Review the OSC *Prestress Manual* for instructions on prestressing records to be kept during prestressing operations.

#### 4-5003 During the Course of Work

Prestressing operations are dangerous. The OSC *Prestressing Manual* contains safety information for prestressing operations. In addition, the OSC Code of Safe Practices, found on the OSC web site, contains safety guidelines to follow for prestressing operations. Before the contractor’s operations begin, review both sources of information in a tailgate safety meeting.

#### 4-5003 During the Course of Work

After the completion of the work for each structure, the contractor must submit corrected working drawings to the resident engineer for transmittal to the Office of Structure Design, documents unit. Remind the contractor that final acceptance of the contract will not be made until the corrected working drawings have been submitted.

#### 4-5004 Measurement and Payment

Payment for prestressing precast concrete members is included in the contract price for furnishing precast members. Prestressing cast-in-place concrete is paid for on the basis of a lump sum price. For guidelines for making monthly progress payments for prestressing cast-in-place concrete, see the Bridge Construction Memo 6-4.0, “Partial Payments,” of the *Bridge Construction Records and Procedures Manual*.

#### 4-5004 Measurement and Payment